

I. Basics

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Restricted User

	Start IOF	"I", "I." or whatever your site has chosen to use. Perhaps "IOF"
Option Menu	Show "IOF Option Menu"	Very restricted list of options. Even so, additional permission may be needed: PUN RDR - restricted. Use PF1 to get long message
	QT command	SDSF compatibility Option 5: Print the Quick Trainer panels Also: Quick Reference card on our website Note: SDSF compatibility describes use of the "O" command. This requires specifying OCMD=GROUPS in the B49CMPAT member. Default is: SETCMPAT MVSCHAR=POUND, MVS command character
	QRF	QRF -> 11 -> 1 -> 15 QRF #9: REXX help
	PF1 to get long message	Use After some inscrutable <shortmsg> Examples: • invalid command • Not authorized
	JUMP command	From any panel, get to the Option menu with "JUMP", or use "/" unless your site uses that for operator commands. Then use "+", or just say "IOF *" Whatever is easiest for you

		to remember.
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Unrestricted user

Job List menu

Job List Menu		Scroll right to show more fields
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Job List Menu Primary Commands

	<code>SORT <field></code> [A/D] FIELD command	SORT examples: SORT JOBNAME SORT JOBID SORT RECS ← error use Field command SORT RECDCOND SORT alone to give choices Multiple sort fields: SORT JOBNAME A JOBID D
	EXCLUDE	EXCLUDE JOBNAME NB CALG Show how line command can be issued as primary command "X" line command, or: using <menu#><line command>: 1-5x EXCLUDE ALLOC LT 5 Exclude jobs with less than 5 track groups allocated EXCLUDE SECTION NE OUTPUT Exclude input and running jobs from display.
	EXTEND	EXTEND: Show less frequently used fields. Recommend using LOCK after using EXTEND to reduce overhead.
	LOCK	Prevent refresh of Job List Menu. Normally IOF refreshes the Job List Menu display after every command, or even simply pressing "ENTER". Lock suppresses this refresh. LOCK can be useful when a very large list is being manipulated, especially after using EXTEND.
	ALTVIEW	Takes over DEST or OWNER column to show m/d/y hh:mm
	CUT/PASTE/ ARRANGE	

Job List Menu LINE commands

Select a job		Show "S" or 2S Or just "2"
Browse job		BROWSE Line command or <menu#>B
EDIT job		EDIT line command or <menu#>EDIT

Job Summary Panel

	Job Summary Panel	JOB INFO section: Jobname/JOBID/etc. STEP section Return Code Program
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		Stepname (name on the exec pgm=) PRSTEP (name on the JCL proc invocation) EXEC PROC= PROC (Name of the cataloged procedure) DATASET section DDNAME STATUS
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Job Summary primary commands

	View Running job	EDIT/SUBMIT Watch a running job from Job list: press ENTER From job summary: REFRESH (REF)
	B	Browse entire job
	LEFT/RIGHT/UP/ DOWN	
	EXCLUDE	
	INPUT	
	SS/SD	
	VIEW	
	EDIT	
	SHOWNULL	
	ARC (ARCHIVE)	

Job Summary Line Commands

	S/B	Browse the file in IOF
	SB	Brows in ISPF
	EDIT (ED)	Edit the file in ISPF
	SNAP (N)	
	EXCLUDE (X)	
	COMP	Compare using SUPER C
	SS/SD	SNAP SYSOUT/ SNAP DATASET
	ALLOC	

BROWSE SYSOUT dataset

	Browse Output	FIND FIND ALL COND (Condense)
	HEX/COLS/CC	
	SS/SD/SNAP	
	NEXT/PREV/NF	
	INDEX/LOCATE	

FIND string

	FIND syntax: <string> [FIRST/LAST/NEXT/PREV] [WORD/PREFIX/SUFFIX] [ALL] [beg-col [end-col]]
	JOB -- strings that contain "JOB" JO PREFIX -- strings that begin "JO" JO SUFFIX -- strings that end "JO"

ISPF pattern	P'J>B' -- Find all strings with J<upper>B P'<' -- find lower case strings X'82' strings that contain x'82' ("b")
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II. Advanced item.

CONSOLE – MCS console support and LONGCMD

CONSOLE	If authorized to issue operator console commands, there are two ways to do it: 1. “#” or “\$” prefix from any IOF panel. Examples: a. # D T b. \$DSPPOOL 2. CONSOLE command to start an MCS console a. CONSOLE to invoke using default console id b. CONSOLE NAME(<consolename>) to specify a desired name c. Can be abbreviate CN 3. AUTOCON ON/OFF a. Option is saved in the IOF user profile b. AUTOCON ON means that any operator command will first invoke the CONSOLE command to start an MCS console 4. Identifying who issued a command a. When MCS console is not being used, the System log will show the JOBID of the user issuing the command: T0945219 00000290 \$DSPPOOL b. When MCS console is being used: i. System log will show when the MCS console is started: T0945219 00000290 IEA630I OPERATOR ISIDSC01 NOW ACTIVE ii. Subsequent commands will show the MCS console name: ISIDSC01 00000290 D T
LONGCMD	Many commands won't fit in the space IOF provides. To issue these commands, start an MCS console using the CONSOLE command, and then enter LONGCMD to bring up a panel that allows you more characters. This panel also saves previous long commands, much like ISPF Option 6. Very useful for SLIP commands, commands to reload LPA content, etc.

ERROR/WARNING <msg#>

	Sometimes IOF will give a message number that is not accompanied by other text. This is happens in certain error conditions, especially in REXX execs, whether provided with IOF or written locally. The ERROR and WARNING commands can be used to get more information than just a number. EXAMPLES: ERROR 1501 results in: -< Memory >- PF1 then gives: Insufficient memory to perform requested function ERROR 1517 results in: -< Partial List >
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	PF1 then gives: Only partial job list returned due to memory constraints Note this is a system memory constraint, and a larger region won't help. ERROR 1503 results in: -< No Match >- PF1 then gives: Nothing matching specified selection criteria was found WARNING is the same as ERROR
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INDEX: Labels, SAVEINDEX, and VIEW command.

	IOF INDEX provides the ability to give labels to places in a large output dataset, so that returning to a known location is quick. See User Guide Chapter 9 for details.
.<label >	Within browse, you can create a label simply by prefixing a string with a ".": .getback As long as you are in the browse session, you can return to this location in the SYSOUT via the "L" command (locate): L getback
LOCATE L	L <label> or LOCATE <label> positions you to that label.
SAVEIN DX SI	Save the index for later use: SI
VIEW V	VIEW as a line command on the Job List Menu or as a primary command on the Job Summary Returns you to BROWSE on that dataset, and reinstates the index
INDEX IND	Shows all of the labels currently in use
SNAP N	On the INDEX panel, if you use the "N" line command, it snaps the content from that label to the next one, writing to the currently open SNAP dataset, or to SYSOUT if there is none.

JAMS – Job Archive Made Simple

ARC	From any IOF panel, enter the ARC command to invoke JAMS either to: 1. Archive a job 2. View a list of archived jobs. • Target audience is for individual users. Most sites have Job archive systems (e.g. SARS) for production jobs. • Individual archived jobs can be migrated. The joblist is displayed using only the system catalog, so the dataset will not be restored unless the job is selected for review. • By default, the archived job is left on spool • A Batch job can be set up to archive itself.
	• The archive is a PDS which, optionally, can be TERSED. (I prefer to avoid TERSE except for large jobs) • Dsn format: <Prefix>.<Category>.<jobname>.<date/time>.<Suffix> Example: ISIDSC.SAMPLE.IEFBR14.ERLXLEQY.IOFJOB - o Prefix -- ISIDSC: Prefix is normally a single level, but can be multiple levels. - o Category - SAMPLE: Category is optional. - o Jobname - IEFBR14

	- o Date/time - ERLXLEQY: Date/time is encoded into an 8 character gibberish level. - o Suffix can be any valid level. Default is IOFJOB
IOFBLKAR	IOFBLKAR can be used to archive multiple jobs. Can be used to archive the currently running job. Bulk archive: • A batch job can be run using the IOFBLKAR REXX EXEC to archive multiple jobs as a group. - o SELECT and EXCLUDE statements can be used to specify which jobs to archive. ▪ TRIALRUN can be specified to suppress actual archive until you're certain the correct jobs will be archived. - o When archiving jobs for multiple users, it can be helpful to specify that the owner be used as the Category. • A job can be archived more than once. - o Sometimes it is desirable to Archive a job more than once. - o The IOF Users guide suggests techniques for how to mark a job as having been archived when multiple archives should be avoided. Currently running job: • In the SELECT statement, specify "CURRENT"

Mail Commands

MAIL - Overview

The IOF Mail interface provides the ability to send emails from an IOF session running in either TSO or Batch. You can:

- Send a simple text email
- Send a z/OS dataset as an attachment.
- Send all or part of a job as an HTML attachment so it can be viewed on a Browser.
- **Also see: ZDS to email a flattened PDS** containing IEBUPDTE control statements.

IOF mail can be invoked by several different commands:

IOFMAIL <dataset name>	Email the dataset as an attachment. If a PDS, each selected member is sent as a separate attachment.
IOFMAIL	Email a brief text, or send a dataset as the mail body, or as an attachment.
IOFXMIT	Email the current ISPF Edit dataset. (It will save the dataset before sending it)
SEND	IOF under ISPF, email the specified content as an attachment. See below for details.

MAIL - SEND/IOFSEND

	The SEND command can be used: • As a line command on the IOF Job List to send a job's output. • As a line command on the IOF Output Group Display to send an output group. • As a primary command on the IOF Job Summary to send the current job. • As a line command on the IOF Job Summary to send an individual sysout data set. • On any other IOF panel to set defaults for the SEND command.
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	Notes: • All or part of a job can be sent. • The output is sent as an attachment, and can be in HTML or TXT format
IOFSEN D JCL PROC	The IOFSEND cataloged procedure can be used to send output from a running job. It uses the IOFSNDME EXEC to send all or part of the currently running job: <pre> //ABEND806 JOB (111,1),&SYSUID,NOTIFY=&SYSUID //ALC1 EXEC PGM=ABEND806 // IF (ABEND RC>4) THEN //ALERT EXEC IOFSEND,DATA=JESDS, // TO='DAVE.CROW@TRIANGLE-SYSTEMS.COM' // ENDIF </pre>

MAIL – Problem Diagnosis

Problem diagnosis	The IOF MAIL interface creates a SYSOUT file that contains an email in SMTP format. It requires that an email server such as CSSMTP be configured on the z/OS system. If the email server does not recognize the output as email, the IOF session will have a SYSOUT that looks something like this: <pre> SYS00091 IOFPROC TSIPROC A 22 L TRISYS.SMTP </pre> If you are not getting email: • If this SYSOUT is visible in your TSO session, the SMTP server is not picking it up. The problem is likely that the email server (CSSMTP) is not running, or it is configured to pick up email in a different SYSOUT class or DEST from the one IOF is using. • If this SYSOUT is not visible, issue the SHOWNULL command on the IOF Job Summary panel for your TSO session. If the SYSOUT dataset is now visible, the email server has processed the email, and deleted the SYSOUT file. The delay is downstream from IOF and the CSSMTP server. Perhaps the CSSMTP email server has lost contact with the target server it communicates with. • The email can have also violated some limit such as total size. Use a small test email that is known to work to see if any email is working.
SHOWNULL	The SHOWNULL command shows SYSOUT DDnames that have been completely processed and deleted. However, in many cases, the data is still on SPOOL and can be viewed simply by selecting the SYSOUT as you normally would.

REARRANGE PANEL COLUMNS

ALTVIEW	cycles between 3 displays
ARRANGE	
	ARRANGE \$TEMP – temporary changes. Or use ARRANGE DEFAULT to get back to where started
	ARRANGE ALLOC BEFORE RECDCOND or ARRANGE ALLOC AFTER RECDCOND
CUT	
	CUT RECDCOND -- remove RECDCOND from display or

	CUT -- where cursor is positioned
PASTE	Paste one or more fields that have been cut
	PASTE BEFORE RECDCOND or PASTE AFTER RECDCOND or PASTE LAST

SNAP

Create SNAP file

SD	SNAP to a disk dataset. (If a snap file already exists, close it). Opens a prompt window. SD DA(<dsn>) other alloc parms SD \$DDNAME(<ddname>)
SS	SNAP to a SYSOUT dataset (If a snap file already exists, close it)

Create SNAP content

SNAP	Copy specified content to current SNAP file. On Job list menu 1SNAP copies entire job to the snap file On Job Summary 1SNAP copies entire SYSOUT to snap file (This is the LOG) Inside Browse: SNAP 100LINES copies the next 100 lines to the SNAP file.
CAPTURE ALL	CAPTURE: Copy current display screen to SNAP file CAPTURE ALL: Copy all of the current display to SNAP file, including columns and rows that cannot be seen.

Close a SNAP file

SNAPCLOSE	This command will close any open snap file. SNAP file is also closed when you exit the panel that created it. (you can drill down and it stays open)
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WIDE SCREEN

Wide Screen	Wide Screen	Use "USER" 43x132 screen. Keeps font same on mode change, so screen gets really big. 1. Requires VTAM logmode to support this. Most systems now use this as default. 2. Requires ISPF SETTINGS (Option 0): Screen Format is DATA(#1), or MAX(#3)
	View LOG	Use Index Show creating new index entries